

Applicants' Response of August 7, 2001 included a Declaration of Prior Invention under 37 C.F.R. § 1.131 wherein the Applicants provided evidence of conception and reduction to practice prior to August 6, 1997, the date of publication of EP 0,787 772. The Examiner has not responded to this Declaration. A copy of the Declaration and the August 7, 2001 filing receipt are included for the Examiner's convenience.

2. Claim rejection under 35 U.S.C. § 103

The Examiner has rejected claims 1-24 and 31-32 under U.S.C. § 103(a) as assertedly unpatentable over Dams (US 4,355,129) in combination with Milbert (US 3,821,140). The examiner has reasserted her rationale set forth in the previous Office Action and added additional comments. The Applicants reassert their arguments of the previous Amendment and Response (filed on August 7, 2001) ("Previous Response"), which they incorporate herein by reference, and address the Examiner's further comments as follows:

The Applicants respectfully suggest that Dams is directed to a composition with improved color stability under corona discharge. (Abstract of Dams). In contrast, the claimed invention is directed to a composition resistant to electrical tracking (page 2, line 13) among other properties. Dams does not disclose or describe a composition with anti-tracking properties, but rather a composition that has color stability in the presence of corona discharge. Hence, the composition of Dams and the composition of the present application are directed to solving different problems.

[T]he purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem that the invention attempts to solve. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem and that fact supports use of that

reference in an obviousness rejection..... If it is directed to a different purpose, the inventor would accordingly have less motivation to consider it.” *In re Clay*, 23 U.S.P.Q.2d 1058, 1061 (Fed. Cir. 1992.).

Accordingly, there is no teaching or motivation to consider a patent dealing with color stability under exposure to corona discharge in addressing the problem of reducing tracking.

A. Discussion Related to Use of Coupling Agent

The applicant uses a coupling agent in an amount effective to act as a surface modifier for the reinforcing filler and the anti-tracking agent and also as a cross-linker for coupling between the reinforcing filler and anti-tracking agent with the polymer. The Examiner has cited Dams column 2, lines 38-49 which ends in the sentence: “It is normally preferred that the treatment of the filler be carried out *in situ*, that is by incorporating the treating agent per se into the curable composition”. The Applicants respectfully note that this quote states “normally preferred”. The composition of Dams may be prepared without *in situ* mixing. Such mixing is not required. Further nowhere in the section cited by the Examiner or elsewhere in Dams is any suggestion made that the organosilicon compounds used for modifying the surface of fillers react with any other component of the composition. In the excerpt of Dams cited by the Examiner, lines 38-42 specifically describe “methods for modifying the surface of fillers” and no reference is made to any other function for the organosilicon compounds listed. Since the only mention made in Dams of the organosilicon compounds is as a surface modifier for fillers and since *in situ* mixing is not required, the Applicants disagree that a skilled artisan would have understood that the organosilicon compounds served any function other than to act as a surface modifier for the filler much less

that the organosilicon compounds would modify a particular component, i.e. the anti-tracking agent.

Further the Examiner asserts that a skilled artisan would have understood that the amount of modifier would be enough to act as a surface modifier and coupling agent (Office Action pages 3, lines 7-9). This assertion likewise makes assumptions that are contrary to the disclosure of Dams. Only surface modification of the filler is described. Basic stoichiometry dictates that the amount of reactant necessary for a desired reaction is determined by considering all species to be reacted. Therefore, if only filler is considered in determining the amount of organic silane to be used, it does not follow that an amount effective for surface treatment of filler and coupling agent is used. Additionally, since *in situ* treatment of the filler is “normally preferred”, embodiments of the Dam’s invention are suggested in which the treatment of filler is not done *in situ* (e.g. by incorporating the treating agents per se into the curable composition). In embodiments where the filler is not treated *in situ* there is no opportunity for the reactions that the Examiner proposes on page 3 of the Office Action. Therefore, the Applicants assert that Dams does not teach or suggest use of a coupling agent present in an amount effective to act as a surface modifier for the reinforcing filler and the anti-tracking agent and in an amount effective to act as a cross-linker for coupling between the reinforcing filler and the anti-tracking agent with the polymer. The Examiner’s assertion that the amount of modifier would be enough to act as a surface modifier and coupling agent would have been understood by a skilled artisan is not supported by the plain text of Dams and is therefore erroneous as a matter of law.

B. Discussion related to processing fluid

Dams does not require a processing fluid. Dams discloses a composition that includes an organopolysiloxane elastomer that may optionally have vinyl groups (Col. 2, lines 16-17), and organosilicon surface modifying agents (Col. 2, lines 41-44). In Claim 1, Applicants claim a composition that includes a silicon polymer, a coupling agent and at least one processing fluid in addition to other components. The Applicants' silicon polymer may correspond in some embodiments to Dams organopolysiloxane, but Applicants' composition as claimed in Claim 1 requires a processing fluid in addition to this component.

Further the organopolysiloxane of Dams as described in Col. 1, lines 30-35 and claimed in Claim 1, "is convertible to the solid elastic state". In contrast the Applicants' processing fluid is an alkylpolysiloxane oil capped with hydroxyl, allyl or phenyl groups at both terminal ends of the molecular chain or a phenyl polysiloxane oil capped with hydroxyl, allyl or phenyl groups at both terminal ends of the molecular chain. This oil is added to facilitate the mixing of the fillers and has the advantage of providing low molecular weight fragments which "continuously move to the surface shortening the time for recovery of water repellency (hydrophobicity)." (Specification, page 6, lines 6-14.)

Similarly, the organosilicon surface modifying agents (Col. 2, lines 41-44) of Dams are disclosed as surface modifiers of fillers, e.g. as reacting with the fillers, and there is no teaching or suggestion that they are an alkylpolysiloxane oil capped with hydroxyl, allyl or phenyl groups at both terminal ends of the molecular chain or a phenyl polysiloxane oil capped with hydroxyl, allyl or phenyl groups at both terminal ends of the molecular chain, or that they have low molecular weight fragments which continuously move to the surface shortening the time for recovery of water repellency (hydrophobicity) as the Applicant's

processing fluid. Accordingly, nothing in the four corners of Dams discloses or suggests Applicants' processing fluid.

Applicant's processing fluid must be interpreted in light of Applicants' specification. However, to underscore the nature of Applicants' processing fluid, the Applicants have added a new claim, Claim 33, to claim alkylpolysiloxane oil capped with hydroxyl, allyl, or phenyl groups at both ends of the molecular chain and phenylpolysiloxane oil capped with hydroxyl, allyl or phenyl groups at both terminal ends of the molecular chain as processing fluids. Support for this claim is found on page 6 of the specification lines 6-8. The Examiner has asserted that a polydiorganosiloxane of Dams that may optionally have vinyl groups (Col. 2, lines 16-17), and the surface modifying agents (Col. 2, lines 43-44) "read on the limitation of the processing fluid." However, neither of these portions of Dams' disclosure discloses an oil in which both terminal ends of the molecule are modified in any particular manner, much less in a specific manner of claim 33.

C. The Milbert reference and improper combination

The Examiner adds no further discussion with regard to Milbert. The Applicants reassert their arguments of the Previous Response and incorporate them by reference. The Applicants question the propriety of using the Milbert reference as the Milbert reference teaches a fire resistant composition. Fire resistance and resistance to electrical tracking are different problems. Hence for the reasons discussed above regarding Dams including *In re Clay*, 23 U.S.P.Q.2d 1058, 1061 (Fed. Cir. 1992), there is no motivation to consider a patent dealing with the problem of fire resistance in addressing the problem of reducing electrical tracking.

Additionally, when an obviousness rejection depends on a combination of references, there must be some teaching, suggestion or motivation to combine the references.

See *In re Rouffet* 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992). In *Rouffet*, the Federal Circuit further stated:

. . . this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, *confronted with the same problems as the inventor and with no knowledge of the claimed invention*, would select the elements from the cited prior art references for combination in the manner claimed.

. . . This court has identified three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art and knowledge of persons of ordinary skill in the art.

47 U.S.P.Q. 2d 1458 (emphasis supplied).

Milbert teaches a fire resistant composition and Dams teaches a composition with color stability under corona discharge. These are very different problems from each other and as discussed above from the problem of reducing tracking addressed by the present invention. Accordingly it can not be said that Milbert and Dams were confronted by the same problems as each other or as the inventor and thus a combination of these references is contradictory to the standard set forth in *Rouffet*.

Furthermore, recently the Federal Circuit has emphasized that there is a need for the Examiner and the Board to specifically identify reasons for combining references. *In re Sang Su Lee*, 00-1158, slip op. at 6-7 (Fed. Cir. Jan. 18, 2002). The court stated that “even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggest the claimed combination.” *Id.* (quoting *In re Rouffet* 47 U.S.P.Q. 2d 1459.) Furthermore, “obviousness cannot be established by combining pieces of prior art absent some teaching, suggestion, or incentive supporting the combination.” *In re Geiger*, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). See also *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products*, 21 F.3d 1068, 1072

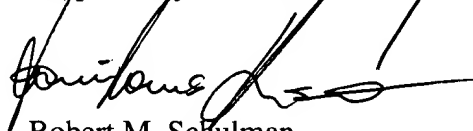
(Fed. Cir. 1994). Thus, the Examiner must provide specific reasons beyond alleged identification of individual components for combining the references.

Further even if Dams and Milbert are combined, it is an artificial combination and should the bits and pieces selected from these references result in a composition having some of the properties of the present invention as the Examiner asserts, the accident of such a result is irrelevant. "It is not pertinent whether the prior art device possesses the functional characteristics of the claimed invention if the reference does not describe or suggest its structure." *In re Mill*, 16 U.S.P.Q2d 1430, 1432-33 (Fed. Cir. 1990).

CONCLUSION

For the reasons discussed above, the Applicants submit that Claims 1-33 are in condition for allowance. The Applicants therefore request that Claims 1-33 be allowed and pass to issue. Should the Examiner believe anything further is desirable in order to place the application in even better conditions for allowance, the Examiner is invited to contact Applicants' undersigned representative at the phone number listed below.

Respectfully submitted,



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